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## by

Major A.J. Cotton

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DISCHARGE FROM THE ARMY**

by

Major A.J. Cotton

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*R.C. Furry*

R.C. FURRY  
Lieutenant Colonel  
Commanding Officer  
1st Psychological Research Unit

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## Abstract

Responses to the items on the Other Ranks Discharge Questionnaire (ORDQ) are broken down across rank. This analysis indicated that nearly all items on the ORDQ show different response patterns across rank. Those items indicating that they were a strong influence on the soldier's decision to leave (or stay) are discussed.

The findings and views expressed in this report are the result of the author's research studies and are not to be taken as the official opinion of the Department of Defence (Army Office).

The Other Ranks Discharge Questionnaire (ORDQ) is administered to all soldiers electing discharge from the Australian Regular Army (ARA). It has been in continuous use since January 1987 with minor changes and the database of responses presents an overview of the reasons soldiers leave (or would have stayed in) the ARA.

Data from the ORDQ presented elsewhere has included the demographic characteristics of the sample (Hodge, 1987), a detailed description of the administration and a factor analysis of the items (Bollen, 1989). While these studies are of obvious use, there are still further uses for the ORDQ data, in particular, are there meaningful groups in the sample that elect discharge for different reasons?

In the context of the personnel manager searching for strategies to reduce attrition it is critical to know what issues need to be addressed. In the case of the ARA the personnel manager must develop strategies that will reduce attrition in soldiers ranging in age from 17 to 55; single, married, defacto, etc; with from one year of full-time service to over 30 years service (Bollen, 1989). It seems unlikely that one set of strategies will satisfy all of these individuals.

#### Breaking Down the Sample

How should we breakdown the sample of responses to the ORDQ then? A recent analysis of responses to the Soldier Attitude and Opinion Survey (SAOS) looked at responses across Military Districts (MDs) and type of unit in which the respondent was serving (Cotton, 1990). Of these, only MD is available in the ORDQ. While MD is relevant for comparing general satisfaction with the Army (which the SAOS measures) it is not so for discharge behaviour. Rather, any differences in reasons for electing discharge caused by the MD in which the soldier was serving would most likely be temporary issues and not be open to correction by personnel policies.

One of the considerations that needs to be made by the personnel manager when measuring the impact of attrition is the loss of experience that is part of attrition; not all who discharge are recruits. Surely then, a breakdown based on length of service or rank must at least be useful to the manager. Further consideration shows that such a breakdown is also likely to be meaningful in terms of providing differences in reasons for electing discharge.

One obvious consideration is that the two breakdowns considered are likely to be very similar in response patterns because length of service and rank will be highly (though not perfectly) correlated. Of the two, rank would appear to be the most useful for the personnel manager, primarily because it is a finite thing (ie it can be divided into a small number of categories). Length of service on the other hand is a continuous variable that requires subjective judgment to separate into meaningful groups. Rank has the advantage of providing an indirect measure of experience and success in the Army.

Given this, rank should provide a useful means of breaking down the sample for comparison purposes.



## Aim

The aim of this study is to provide an analysis of responses to the items on the ORDQ across rank of respondent to identify whether there are different response patterns by rank. Any differences encountered in the analysis will be briefly discussed.

## Method

### Sample

Responses to ORDQs administered to all soldiers electing discharge from October 1988 to the present were included in the analysis. This time frame is used because the ORDQ was revised in October 1988 and some new items were added to the form. This resulted in a sample of 1880 completed ORDQs.

### Data Transformations

The ORDQ asks respondents to rate how much influence a particular item had on their decision to leave the ARA (or would have influenced them to stay in as the case may be) on a six point scale, from 0 - 'Not Applicable' through 1 'No influence on Decision' to 5 'Very Considerable Influence'. It was decided that the 'Not Applicable' rating would not be included in the analysis, primarily because we are only interested in factors that have some effect on a soldier and items that the individual sees as not applicable will only be misleading.

For ease of readability the ratings on the ORDQ items were collapsed into a three point scale as follows:

- a. The "No Influence on Decision" category was left as No Influence (No Inf).
- b. The "Slight" and "Moderate Influence" categories were collapsed into one category titled Moderate Influence (Mod Inf).
- c. The "Considerable" and "Very Considerable Influence" categories were collapsed into one category called Strong Influence (Str Inf).

A second reason for collapsing the data this way is that rating scale data is notoriously unreliable and collapsing the data this way removes some of the possible error by reducing the number of cut points from four to two.

Worn rank was used as the other variable, substantive rank is also recorded on the ORDQ but it was considered that worn rank would more accurately reflect the respondents rank cohort. Also, the incidence of temporary promotion among soldiers in the ARA is low and therefore there should be very few cases where a respondents worn rank and substantive rank differ.

### Analyses

Although no formal hypotheses were proposed, the chi-square statistic was used to identify whether or not the differences in responses across ranks were statistically significant. Standardised residuals provided the basis for the discussion of the items that show significant differences across rank.

## Results

The chi-square analyses indicated that significant differences ( $p < 0.01$ , ie the probability is less than one chance in 100) in response patterns by rank occurred in 69 of 96 (72%) comparisons made. As a result of this only results from those items where 50% or more of respondents reported that the item was a "Strong Influence" in their decision to leave the Army (or would have been in any decision to stay) will be reported here. Of these, there were 11 of 13 that showed significant differences (for Tables see Annex A).

Influences on the decision to leave the Army. The following items showed significant differences across the rank of the respondent:

- a. Item 10 - To spend more time with child/children - results indicated that generally PTEs felt that this was less of an influence as did WOs but that it was a stronger influence for CPLs and SGTs.
- b. Item 15 - Lack of support from superiors - this was reported by junior ranks (PTE & CPL) as more of an influence in their decision to leave while for WOs it was reported strongly as less of an influence.
- c. Item 18 - Lack of paid overtime - this was very strongly reported by junior ranks as a strong influence in their decision to leave while again for WOs it was reported (also quite strongly) as not an influence.
- d. Item 19 - Army career management - this to was seen by senior soldiers , WOs & SGTs, as having no influence on the decision to leave but was seen as an influence by CPLs.
- e. Item 33 - Desire to try talents in civilian employment - also demonstrated less of an influence for WOs and SGTs but a reasonable influence for PTEs.

Influences to stay in the Army. The following items showed significant differences across the rank of the respondent:

- a. Item 5 - Payment of interest on DFRDB\* contributions for those who leave without a pension - this was reported as a not an influence by SGTs and WOs but as a possible influence by PTEs and CPLs.
- b. Item 9 - Higher pay - this was reported by more PTEs and CPLs as something that would have influenced them to stay while it was reported as no influence by more senior soldiers.
- c. Item 13 - More frequent pay and allowances reviews - this was seen by CPLs as a factor that may have influenced them to stay in the Army while it was seen as no influence by WOs.

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\* Defence Force Retirement and Death Benefit Fund

- d. Item 23 - Government commitment to maintenance of conditions of service - while WOs were fairly neutral on this, SGTs felt that it would have contributed to them staying in the Army while PTEs felt that it would have had no influence.
- e. Item 25 - Better leadership by superiors - More senior soldiers reported this as no influence while it was reported as a possible influence by more PTEs.
- f. Item 33 - Less bureaucracy/'red tape' - Again this was seen as a possible influence by less senior soldiers than junior soldiers

Items showing no differences. Of the 13 items that were seen as a strong influence by 50% or more of the respondents it is interesting to note that the two which showed no differences in ratings across rank were those referring to politicians. Namely Section Three Item 28 (A more positive commitment shown by politicians...) and Item 34 (A better understanding by politicians of the problems...).

#### Discussion

#### Overall Results

In terms of reasons that have a strong influence over a soldier's decision to leave or stay in the Army, pay and financial conditions is the most important. Five of the "strong influences" for staying in (or leaving) the Army relate to issues of pay and conditions with the remainder fairly equally distributed among politicians, family, leadership, career management, bureaucracy and a desire to try civilian life.

Although the distinction of "strong influence" is somewhat arbitrary, the results are strong enough to suggest that issues relating to financial conditions of service are very important for those leaving the Army.

#### Differences across Ranks

In all cases (except Government commitment on pay and conditions) senior soldiers felt that the reasons given had (or would have) less effect on their decision than junior soldiers. This indicates that senior soldiers are leaving the Army for reasons that are external to the system, ie there is little change the Army could make that would stop the senior soldier from leaving.

Therefore, if any effort is to be made to reduce attrition, then it seems logical that the bulk of the effort, be it monetary or otherwise, should be aimed at the junior soldier. This is the group that may be "saved" because, at least relative to the senior soldier, there are aspects of the Army that may influence the soldier's decision to leave the Army. Further to this, it seems likely that improvements to financial conditions of service would have the most impact.

### Conclusion

The results presented in this report give a clear indication that there are differences in reasons for leaving the Army according to the rank of the soldier. These differences indicate, quite strongly, that any effort made to retain soldiers should be directed at the junior soldier. Because it is less likely that we can save the senior soldier as they are leaving for reasons external to the system.

Finally, these results indicate that changes to financial conditions of service such as level of pay, more frequent pay reviews and some form of paid overtime (or at least recognition of effort expended by the soldier) would have the most impact in "saving" the soldier who is planning to leave the Army.

### References

- Bollen, I.D. (1989). Other Rank Discharge Survey: The First Year (RN 3/88). Canberra, Australia: Department of Defence (Army Office), 1st Psychological Research Unit.
- Cotton, A.J. (1990). Soldier Attitude and Opinion Survey by Unit Type and Military District (SR 1/90). Canberra, Australia: Department of Defence (Army Office), 1st Psychological Research Unit.
- Hodge, B.J. (1987). Research into Manpower Attrition in the Australian Regular Army (RR 2/87). Canberra, Australia: Department of Defence (Army Office), 1st Psychological Research Unit.

## Annex A

### Chi-square Results

The tables that follow show the breakdown of responses to individual ORDQ items across MD and Unit Type. Each page deals with one ORDQ item with the breakdown by Unit type at the top of the page and the breakdown by MD at the bottom.

Each cell in the tables gives the count or actual number of respondents falling in this category, and beneath that the standardised residual for that cell. The standardised residual gives a standard measure of the difference between the actual count and the count that would have been expected if the two variables, eg ORDQ item rating and MD, were independent of one another. A negative standardised residuals means that the count is less than expected, while a positive count indicates that there were more than expected. Generally, a residual with an absolute value about 1.5 or greater can be considered as important.

### Reasons for Leaving

**Table A-1**

Crosstabulation of Item 10: "Spend more time with child" by worn rank

COUNT		PTE		CPL		SGT		WO		
STD RES		1		2		3		4		
No Influence	1	61	74	32	64	231				
		1.6	-1.3	-1.0	.9	25.6%				
Mod Influence	2	31	82	41	64	218				
		-2.3	.1	.8	1.4	24.2%				
Str Influence	3	102	180	76	93	453				
		.5	.9	.1	-1.6	50.2%				
COLUMN TOTAL		194	336	149	223	902				
		21.5%	37.3%	16.5%	24.7%	100.0%				

Table A-2

Crosstabulation of Item 15: "Lack of support from officers" by worn rank

	COUNT STD RES	PTE	CPL	SGT	WO	
		1	2	3	4	
No Influence	1	134	130	48	90	402
		-1.5	-1.4	.4	4.4	23.6%
Mod Influence	2	176	171	49	53	449
		.5	.5	-.3	-1.3	26.4%
Str Influence	3	334	323	96	97	850
		.7	.6	.0	-2.1	50.0%
COLUMN TOTAL		644	624	193	240	1701
		37.9%	36.7%	11.3%	14.1%	100.0%

Table A-3

Crosstabulation of Item 18: "Insufficient compensation for overtime" by worn rank

	COUNT STD RES	PTE	CPL	SGT	WO	
		1	2	3	4	
No Influence	1	72	92	44	114	322
		-4.6	-2.5	1.2	10.6	18.9%
Mod Influence	2	114	122	46	56	338
		-1.3	-.3	1.2	1.5	19.8%
Str Influence	3	462	416	103	62	1043
		3.3	1.5	-1.4	-6.7	61.2%
COLUMN TOTAL		648	630	193	232	1703
		38.1%	37.0%	11.3%	13.6%	100.0%

Table A-4

Crosstabulation of Item 19: "Army career management" by worn rank

---

	COUNT STD RES	PTE	CPL	SGT	WO	
		1	2	3	4	
No Influence	1	127	121	50	84	382
		-1.4	-1.6	.9	4.0	22.0%
Mod Influence	2	181	152	48	60	441
		1.2	-.7	-.4	-.4	25.4%
Str Influence	3	345	361	103	105	914
		.1	1.5	-.3	-2.3	52.6%
COLUMN TOTAL		653	634	201	249	1737
		37.6%	36.5%	11.6%	14.3%	100.0%

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Table A-5

Crosstabulation of Item 33: "Desire to try talents in civvy life" by worn rank

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	COUNT STD RES	PTE	CPL	SGT	WO	
		1	2	3	4	
No Influence	1	129	112	53	83	377
		-1.3	-1.9	1.4	3.8	22.6%
Mod Influence	2	154	170	55	74	453
		-1.5	.7	.3	1.0	27.1%
Str Influence	3	356	314	86	85	841
		1.9	.8	-1.2	-3.3	50.3%
COLUMN TOTAL		639	596	194	242	1671
		38.2%	35.7%	11.6%	14.5%	100.0%

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## Reasons for Staying

Table A-6

Crosstabulation of Item 5: "Payment of Interest on DFRDB" by worn rank


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	COUNT STD RES	PTE	CPL	SGT	WO	
		1	2	3	4	
No Influence	1	117	78	48	104	347
		-1.8	-4.8	1.8	10.4	21.2%
Mod Influence	2	168	125	33	32	358
		2.2	-1.1	-.9	-1.3	21.9%
Str Influence	3	363	424	94	47	928
		-.3	3.6	-.5	-5.6	56.8%
COLUMN TOTAL		648	627	175	183	1633
		39.7%	38.4%	10.7%	11.2%	100.0%

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Table A-7

Crosstabulation of Item 9: "Higher pay" by worn rank


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	COUNT STD RES	PTE	CPL	SGT	WO	
		1	2	3	4	
No Influence	1	58	72	28	72	230
		-3.1	-1.3	.4	6.7	13.0%
Mod Influence	2	157	162	70	101	490
		-2.0	-1.3	2.0	3.6	27.6%
Str Influence	3	454	416	103	83	1056
		2.8	1.5	-1.5	-5.6	59.5%
COLUMN TOTAL		669	650	201	256	1776
		37.7%	36.6%	11.3%	14.4%	100.0%

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Table A-8

Crosstabulation of Item 13: "More frequent pay and allowance review" by worn rank

	COUNT					
	STD RES	PTE	CPL	SGT	WO	
		1	2	3	4	
No Influence	1	100 -.3	90 -1.2	25 -1.1	62 3.4	277 15.8%
Mod Influence	2	230 .8	189 -1.7	67 .1	98 1.4	584 33.3%
Str Influence	3	326 -.5	366 2.1	107 .6	96 -3.0	895 51.0%
	COLUMN	656	645	199	256	1756
	TOTAL	37.4%	36.7%	11.3%	14.6%	100.0%

**Table A-9**

Crosstabulation of Item 23: "Government commitment on condition of service"  
by worn rank

COUNT		PTE		CPL		SGT		WO		
STD RES		1		2		3		4		
No Influence	1	136	97	30	40	303				
		2.3	-1.3	-.9	-.8	17.4%				
Mod Influence	2	179	160	42	71	452				
		.9	-.4	-1.5	.4	26.0%				
Str Influence	3	327	377	131	149	984				
		-1.9	1.0	1.5	.2	56.6%				
COLUMN TOTAL		642	634	203	260	1739				
		36.9%	36.5%	11.7%	15.0%	100.0%				

Table A-10

Crosstabulation of Item 25: "Better leadership by senior officers" by worn rank

	COUNT STD RES	PTE	CPL	SGT	WO	
		1	2	3	4	
No Influence	1	97	113	50	72	332
		-2.5	-.7	1.9	3.4	19.0%
Mod Influence	2	154	156	39	72	421
		-.3	.2	-1.3	1.4	24.1%
Str Influence	3	406	368	111	110	995
		1.7	.3	-.3	-2.9	56.9%
COLUMN TOTAL		657	637	200	254	1748
		37.6%	36.4%	11.4%	14.5%	100.0%

Table A-11

Crosstabulation of Item 33: "Less Bureaucracy/'Red tape'" by worn rank

	COUNT STD RES	PTE	CPL	SGT	WO	
		1	2	3	4	
No Influence	1	83	96	28	62	269
		-1.8	-.2	-.5	3.5	15.5%
Mod Influence	2	160	138	44	72	414
		.4	-1.0	-.5	1.3	23.8%
Str Influence	3	406	397	126	124	1053
		.6	.7	.5	-2.6	60.7%
COLUMN TOTAL		649	631	198	258	1736
		37.4%	36.3%	11.4%	14.9%	100.0%